

REMARKS

Claims 1-13 and 15-17 are all the claims pending in the application. By this Amendment, Applicant editorially amends claims 1, 13, 15, and 16 to further clarify the invention and cancels claim 14. The amendments to claims 1, 13, 15, and 16 were made for reasons of precision of language and consistency and are not intended to narrow the literal scope of the claims.

I. Incomplete Office Action

In every Office Action, each pending claim should be mentioned by number, and its treatment or status given. MPEP 707.07(i). However, claim 17 was not mentioned or addressed in either the Office Action Summary or the body of the Office Action dated February 9, 2006. Applicant's undersigned representative respectfully requests that the Examiner issue a new Office with a new restart date pursuant to MPEP 710.06, which would address all claims pending in the application.

II. Summary of the Office Action

Claim 11 is withdrawn from consideration as being drawn to a non-elected invention. Claims 1 and 4-6 are rejected under 35 U.S.C. § 102(e) and claims 2, 3, and 7-16 are rejected under 35 U.S.C. § 103(a). The Examiner failed to address the previously added claim 17.

III. Claims Rejections under 35 U.S.C. § 102(e)

Claims 1 and 4-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,223,037 to Parkkila (hereinafter "Parkkila"). Applicant respectfully traverses this rejection in view of the following comments.

By way of an overview, this rejection was previously made of record in the first Office Action of November 11, 2003 and was withdrawn in the Final Office Action of May 5, 2004 (the

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U.S. Appl. No. 09/862,600
Attorney Docket No.: Q64570

Examiner found Applicant's arguments persuasive and rejected the claims over new grounds).

The Examiner now again rejected claims 1 and 4-6 under the same grounds as in the first Office Action.

To be an "anticipation" rejection under 35 U.S.C. § 102, the reference must teach every element and recitation of the Applicant's claims. Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. Thus, the reference must clearly and unequivocally disclose every element and recitation of the claimed invention.

Of the rejected claims, only claim 1 is independent. Independent claim 1 recites a unique combination of features including:

when signal intensity received by the terminal was approximately constant before the search, the terminal performs a partial search by using one or more sequences each associated with a predetermined list of frequencies from all of said frequencies, and when signal intensity received by the terminal was not approximately constant before the search, the terminal first performs full search by scanning all of said frequencies.

The Examiner asserts that claim 1 is directed to a method of connecting a terminal to a network and is anticipated by Parkkila. Specifically, the Examiner alleges that in Parkkila, during the power up (allegedly disclosing the signal intensity being approximately constant), the station camps on BCCH of the selected network to reselect the strongest channel within the selected network (allegedly disclosing partial search) and that after the signal loss (allegedly disclosing

varied intensity before the search), the station performs full search to locate a network (*see* page 13 of the Office Action). Applicant respectfully disagrees.

Parkkila discloses that as the mobile station is powered up within the network, it selects a cell and camps on the BCCH carrier of the selected cell. The station then performs reselection of BCCH carriers in the selected network. In the reselection, the mobile station determines and maintains an average received level for all BCCH carriers of the cell and also measures six strongest carriers. This process is repeated as long as the station does not lose the service (Fig. 3; col. 7, lines 15 to 34). Once the service is lost, Parkkila discloses the station executing partial searches, and only after the failure of these partial searches, a full search is performed (Fig. 3; col. 7, line 35 to col. 8, line 8).

In Parkkila, however, when the mobile station (after the power up) reselects a stronger channel, it does not follow that the signal intensity was approximately constant before the reselection. That is, the signal intensity could be decreasing or increasing as the mobile station moves further into or out of the cell. In other words, Parkkila only discloses reselecting a channel after the power up and ***fails to disclose or suggest anything about the signal intensity prior to reselection.***

It is respectfully submitted that the allegation that the signal intensity is approximately constant before the reselection amounts to a mere speculation by the Examiner. Applicant respectfully submits that this rejection is improper as it lacks “sufficient specificity” required under 102. “[A]nticipation under § 102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the

claim, the rejection must be based on § 103 which takes differences into account.” *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985); MPEP § 2131.

Moreover, when the mobile station loses service, it means that the mobile station is not receiving a signal and not that the signal intensity is varied, (as alleged by the Examiner, *see* page 13 of the Office Action). For example, the loss of service could occur when the user moved away from the network (varied intensity prior to search) or is in a dead area (constant intensity before the search), col. 7, lines 35 to 47.

Furthermore, even assuming *arguendo* that a loss of signal can somehow be classified as varied intensity prior to the search, then Parkkila fails to disclose or suggest the mobile station first performing a full search. In other words, in Parkkila, after the signal loss, partial searches are always first performed (col. 7, line 48 to col. 8, line 13), as acknowledged by the Examiner on page 13 of the Office Action. In short, Parkkila fails to disclose or suggest that after the loss of service (alleged varied signal intensity), full search is first performed by scanning all of the frequencies.

In short, Parkkila fails to teach or suggest monitoring signal intensity to see if it is constant. The measurements that are performed in Parkkila are only to see if the signal intensity is above the path loss threshold (C1). In other words, Parkkila performs scanning of the previously received strongest carriers regardless of whether signal intensity was constant or not. Accordingly, Parkkila does not teach or suggest varying the type of searches to perform based on whether the intensity of the signal is constant before the search.

Therefore, “when signal intensity received by the terminal was approximately constant before the search, the terminal performs a partial search by using one or more sequences each

associated with a predetermined list of frequencies from all of said frequencies, and when signal intensity received by the terminal was not approximately constant before the search, the terminal first performs full search by scanning all of said frequencies,” is not disclosed by Parkkila, which performs a partial search first regardless of whether the intensity of the signal is constant before the search. For at least these exemplary reasons, Applicant respectfully submits that independent claim 1 patentably distinguishes from Parkkila. Applicant, therefore, respectfully requests the Examiner to reconsider and to withdraw this rejection of independent claim 1. Also, Applicant respectfully submits that claims 4-6 are allowable at least by virtue of their dependency on claim 1.

IV. Claim Rejections under 35 U.S.C. § 103(a)

Claims 2, 3, 7-10, and 12-16 stand rejected under 35 U.S.C. § 103(a).

Claims 9, 10, and 12-14

Claims 9, 10, and 12-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,343,070 to Klas et al. (hereinafter “Klas”) in view of U.S. Patent No. 6,011,960 to Yamada et al. (hereinafter “Yamada”) and Parkkila. Applicant respectfully traverses this rejection in view of the following comments. Claim 14 has been canceled. Therefore, this rejection is moot with respect to claim 14.

Of these remaining rejected claims, only claim 9 is independent. Independent claim 9 recites: “means for determining what type of scanning to perform based on whether signal intensity is constant or not before a periodic search of the radio communication network for a signal.” The Examiner alleges that Yamada discloses determining what type of scanning to perform based on the type of wireless system and the received RSSI and Parkkila discloses

performing the scanning based on whether the signal intensity is constant before a periodic search (*see* page 14 of the Office Action). Applicant respectfully disagrees.

Applicant respectfully submits that Klas in view of Yamada and Parkkila, taken in any conceivable combination, fail to teach or suggest the unique features of claim 9 recited above. The Examiner acknowledges that Klas fails to teach or suggest the above-noted features of claim 9. Yamada and Parkkila fail to cure the deficient teachings of Klas.

Yamada, similar to Parkkila, only discloses performing a full scan when an initial partial scan fails. That is, Yamada discloses performing a cache scan every sixty seconds and then a full scan every five minutes to look for the presence of the WTS control channel. The initial scan fails, when no WTS control channels are found (col. 13, lines 35 to 63). In short, Yamada discloses that the type of scanning to perform depends on whether the WTS control channel is found (col. 13, lines 35 to 63).

The Examiner alleges that in Yamada, the type of scan to perform is based in part on RSSI (*see* page 14 of the Office Action). Applicant finds no basis for this position in the Yamada reference. Yamada discloses using RSSI only to select the next channel from the list of channels to be checked (col. 13, lines 40 to 45). That is, in Yamada, the RSSI is only used to select the next channel for an examination. In other words, in Yamada, the type of scanning to perform is determined by the presence or absence of the WTS control channel and not the RSSI. Moreover, Yamada does not disclose or suggest determining which type of scan to perform based on whether the signal intensity was constant or not.

The Examiner acknowledges that Yamada does not disclose or suggest basing the type of scanning to perform based on whether the signal intensity is constant or not. The Examiner,

however, alleges that Parkkila cures the deficient teachings of the Klas and Yamada reference. Applicant respectfully submits that types of scans performed in Parkkila do not vary based on whether or not the signal intensity before the search is constant or not. In Parkkila, just like in Yamada, after the signal loss, partial searches are always performed first, and then when the partial searches fail, full searches are performed.

Moreover, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine Parkkila with Yamada and Klas. The Examiner alleges that one of ordinary skill in the art would have been motivated to combine Parkkila and Yamada to quickly determine if its in the CDMA network or AMPS network when there is a loss of service (*see* page 5 of the Office Action). The relevance of Parkkila is not understood. That is, it is Applicant's position that there is no motivation to combine Parkkila with Yamada and Klas.

Yamada already discloses performing WTS cache scan periodically either at the end of each conversation, when a loss of signal occurs, or when the cache scan timer times out (col. 14, lines 22 to 29). Since Yamada discloses performing cache scans when a signal loss occurs, there is no motivation to combine Parkkila with Yamada and Klas. It is Applicant's position that the Office Action is exercising impermissible hindsight, and but for the present invention one of ordinary skill in the art would not have combined Parkkila with Yamada and Klas.

Therefore, "means for determining what type of scanning to perform based on whether signal intensity is constant or not before a periodic search of the radio communication network for a signal," as set forth in claim 9 is not suggested or taught by the combined teachings of Klas, Yamada, and Parkkila, which lack determining the type of scanning to perform based on whether the received signal intensity is constant or not. For at least these exemplary

reasons, Applicant respectfully submits that independent claim 9 is patentable over the combined teachings of Klas, Yamada, and Parkkila. Applicant, therefore, respectfully requests the Examiner to reconsider and withdraw this rejection of the independent claim 9. Also, Applicant respectfully submits that claims 10-13 are patentable at least by virtue of their dependency on claim 9.

Moreover, dependent claim 13 recites: “means for scanning all said frequencies, wherein, when the intensity of the signal before the periodic search was varying, the terminal does not perform the partial scan and scans all said frequencies using means for scanning all said frequencies.” The Examiner alleges that Yamada discloses the unique features of this claim in col. 13, line 64 to col. 14, line 6 (*see* page 6 of the Office Action). Applicant respectfully disagrees.

Yamada’s col. 13, line 64 to col. 14, line 6 recite:

If the initial cache scan fails to find a valid WTS control channel (state 280) or a WTS which will accept its registration request, the PCS handset 50 commences an initial full scan, the details of which are shown in FIG. 8. With reference thereto, the initial full scan is similar to the initial cache scan, but is not limited to scanning only those channels on the cache list 92. Rather, the initial full scan scans the entire range of possible WTS control channels (state 300), which may be identified by a programmable value stored in the PCS handset 50.
(emphasis added).

Indeed, the above recited passage, only discloses performing a full scan when the partial scan fails. That is, it clearly fails to disclose or suggest performing various types of scans based on

the signal intensity before the search. In Yamada, the WTS cache scan is performed when the cache scan timer times out. Yamada, does not disclose or suggest that when the intensity of the signal before the periodic search was varying, the terminal does not perform the partial scan and scans all said frequencies first using means for scanning all said frequencies. In Yamada, the full scan is always performed after a cache scan. Klas and Parkkila fail to cure the deficient disclosure of Yamada. For at least this additional exemplary reason, dependent claim 13 is patentable over the combined teachings of Klas, Yamada, and Parkkila.

Claims 2 and 3

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Parkkila in view of U.S. Patent No. 5,701,585 to Kallin et al. (hereinafter “Kallin”). Applicant respectfully traverses this rejection with respect to the dependent upon claim 1, claims 2 and 3. Applicant has already demonstrated that Parkkila does not meet all the requirements of the independent claim 1.

Kallin is relied upon only for its teaching of ranking the cells according to their importance. That is, Kallin discloses that the order of the list in which the search is performed can be varied based on a present environment or on a prior knowledge (col. 4, lines 31 to 45). Kallin, however, fails to cure the deficiencies of Parkkila. Kallin only discloses that since measuring the signal strength and other characteristics of the cell is usually limited to a maximum number of 12, 20 or 32, it may be beneficial to pre-select these 12, 20 or 32 cells (col. 1, lines 20 to 50). The cells can be ranked by quality of service and type (col. 2, lines 8 to 16). In short, Kallin does not compensate for the above-identified deficiencies of Parkkila.

Together, the combined teachings of these two references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claim 1. Since claims 2 and 3 are dependent upon claim 1, they are patentable at least by virtue of their dependency.

Claims 7 and 8

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Parkkila in view of U.S. Patent No. 6,418,318 to Bamburak et al. (hereinafter “Bamburak”). Applicant respectfully traverses this rejection with respect to the dependent upon claim 1, claims 7 and 8. Applicant has already demonstrated that Parkkila does not meet all the requirements of independent claim 1.

Bamburak is relied upon only for its teaching of determining the last frequency band of the last service provider before the disconnection. That is, Bamburak discloses that after a power up, the mobile station checks the most recently used control channel to determine whether an optimal service provider is available on the channel. If this optimal service provider is not obtainable, then the MS searches through the frequency spectrum in a pre-determined order until an optimal or acceptable service provider is located (col. 3, lines 45 to 67). In short, Bamburak does not compensate for the above-identified deficiencies of Parkkila.

Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claim 1. Since claims 7 and 8 depend on claim 1, they are patentable at least by virtue of their dependency.

Claim 15

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Parkkila in view of U.S. Patent No. 6,282,419 to Findikli (hereinafter “Findikli”). Applicant respectfully traverses this rejection with respect to the dependent upon claim 1, claim 15. Applicant has already demonstrated that Parkkila does not meet all the requirements of independent claim 1. Findikli does not cure the deficient teachings of Parkkila. Accordingly, claim 15 is patentable at least by virtue of its dependency on claim 1.

Moreover, claim 15 recites: “wherein, when the signal intensity received by the terminal was approximately constant before loss of service, the terminal performs the partial search, and wherein, when the signal intensity received by the terminal was not approximately constant before the loss of service, the terminal first performs the full search by scanning all of said frequencies.” Applicant respectfully submits that the combined teachings of Parkkila and Findikli do not disclose or suggest these unique features of claim 15.

Parkkila does not disclose or suggest performing various searches based on the signal intensity before the loss of service. In Parkkila, regardless of signal intensity before the loss of service, partial scans are performed (col. 7, line 35 to col. 8, line 8). Findikli only discloses performing various searches when the control channel is changed. No where throughout Findikli’s disclosure is it disclosed or suggested that the intensity of the signal received by the terminal prior to the loss of service, i.e., whether it is constant or not before the search, plays a role on what kind of searches to perform. In short, Findikli does not cure the deficient teachings of Parkkila. For at least this additional exemplary reason, claim 15 is patentable over the combined disclosure of Findikli and Parkkila.

Claim 16

Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada in view of Findikli and Parkkila. Applicant respectfully traverses this rejection, in view of the following comments.

Among a number of unique features, claim 16 recites: “determining whether signal intensity of the terminal is constant or not prior to the terminal performing a periodical network search; and performing the periodical network search by periodically scanning frequencies of the radio communication network...when the signal intensity of the terminal is approximately constant before the periodic network search, executing a partial frequency scanning, and when the signal intensity of the terminal is not approximately constant before the periodic network search, performing a full scanning of all the frequencies without performing any of the partial frequency scanning.”

The Examiner alleges that Yamada discloses determining signal intensity before the periodic network search in col. 12, lines 58 to 67, that Findikli discloses executing partial search when signal intensity is not approximately constant before the search and also scanning all frequencies, and that Parkkila discloses that the signal strength is approximately constant before a loss of service (*see* pages 11 to 12 of the Office Action).

To begin, Applicant respectfully submits that the Examiner’s combination is not understood. If Parkkila is being cited only for allegedly disclosing that the signal strength is approximately constant before the loss of service (page 12 of the Office Action), then there is no motivation to combine Parkkila with Yamada. Parkkila does not disclose or suggest varying the type of scans based on the signal intensity being constant or not. Accordingly, it appears that but for the present invention, there is no motivation to combine Parkkila with Yamada in the manner

suggested by the Examiner. That is, the Examiner is exercising impermissible hindsight in the manner Parkkila and Yamada are combined.

In other words, if one of ordinary skill in the art would have somehow combined Parkkila and Yamada, then the mobile terminal would execute partial scanning regardless of whether signal intensity prior to the loss of service is constant or not, as disclosed by Parkkila (col. 7, lines 35 to 63). Moreover, since Yamada already discloses performing cache scans after the loss of service, there is no motivation to combine Parkkila with Yamada.

Findikli fails to cure the deficient disclosure of Parkkila and Yamada. Findikli discloses that when the terminal 20 is not moving, then any type of scanning will be suspended until the terminal moves to another cell. Once the terminal moves to another cell, partial scans are performed. Accordingly, Findikli only discloses performing partial scans when the terminal moves to another cell (col. 7, lines 31 to 44). Findikli fails to disclose or suggest first performing full scans when the signal intensity is not constant prior to the search.

Moreover, Findikli only discloses performing various searches when the control channel is changed. No where throughout Findikli's disclosure is it disclosed or suggested that the intensity of the signal, *i.e.*, whether it is constant or not before the search, plays a role on what kind of searches to perform. In Findikli, first, the partial searches are performed and then full scans are executed. In short, Findikli does not cure the deficient disclosure of Yamada and Parkkila.

For at least these exemplary reasons, claim 16 is patentable over the combined teachings of Yamada, Parkkila, and Findikli. Therefore, Applicant respectfully requests the Examiner to withdraw this rejection of claim 16.

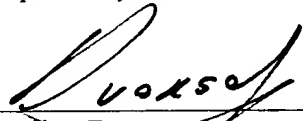
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V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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